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09/491,467	01/26/2000	Yoshifumi Sakamoto	13178(JA998-139)	8561

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EXAMINER	
MA, JOHNNY	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/491,467	SAKAMOTO ET AL.	
	Examiner	Art Unit	
	Johnny Ma	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *03 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-8 and 13-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-8 and 13-16* is/are rejected.

7)☒ Claim(s) *13-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/13/2004 have been fully considered but they are not persuasive.

Applicant argues "[i]n particular, applicants note that the claims, as amended and presented herein, clearly emphasize the operative relationship of the remote program display and selection apparatus 10, which is only operatively communicated with the digital broadcast receiver 50 through the intermediary of an infrared transmitted and receiver unit 14 on the apparatus 10 and a similar unit 58 on the receiver 50 in order to be able to, respectively, transmit and receive, in particular, electronic program guide data (EPG) data" (Remarks, pg. 5, lines 10-15). However, it is unclear to the examiner as to how such an operative relationship distinguished the claimed invention from the cited prior art. Particularly, as discussed in the rejection of claim 1 below. The Darbee et al. reference discloses a two-way remote control is operatively coupled via IR to a set top box (Darbee 8:27-56) wherein program guide data is sent to the remote control unit via the IR link (Darbee 9:16-20), the Donnelly reference was relied upon for its teach of a digital broadcast. Furthermore, the Darbee et al. reference also discloses the inventions avoids displaying such data in a disruptive matter on a television screen wherein "one principal advantage achieved through the use of a remote control in accordance with the present invention is that a program schedule, advertisement or other display depicted on the remote control does not interfere with normal program viewing on the television (Darbee 3:15-18).

Applicant also argues "[t]he particular interchangeability and transmission of data between the digital broadcast receiver 50 and the program display and selection apparatus 10, wherein the latter includes a liquid crystal display screen 12, permitting a program table 78 to be displayed pertaining to the respective program information, is not at all disclosed in the prior art" (Remarks pg. 5, lines 18-21). The examiner respectfully disagrees. The examiner first notes that a liquid crystal display screen does not appear in any of the present claims. The Darbee et al. clearly discloses the transmission of data between the broadcast receiver and the program display and selection apparatus wherein "new program data might be provided to the remote control unit 10 using an IR link" (Darbee 9:16-20). Furthermore, the Darbee et al. reference discloses a LCD and "permitting a program table 78 to be displayed pertaining to the respective program information" wherein "the program guide is operated on a small 5-line by 20-character LCD screen or display 14 that is provided on the remote control unit 10" (Darbee 7:66-7:1).

Claim Objections

2. Claim 13 is objected to because of the following informalities: The language that appears in claim 13 is inconsistent from claims that have been previously presented throughout prosecution and the remaining present claims. Specifically claims 13 currently recites "a transmitting means for transmitting the operational information input comprising said EPG data to said digital broadcast receiver" whereas in claim 1 and claim 8, the claim recited "a receiving means for receiving EPG data transmitted from the digital broadcast receiver." Also note, that a similar objection was made in a previous Office Action on 2/12/2004 wherein an amendment was made to correct this objection.

For the purpose of examination, the examiner will interpret the limitation in claim 13, "a transmitting means for transmitting the operational information input comprising said EPG data to said digital broadcast receiver" to read "a transmitting means for transmitting the operational information input to said digital broadcast receiver" Furthermore, if interpreted literally, there is no support for the limitation as claimed.

3. Claims 14-16, are dependent on claim 13, are also objected to for the same reasons set forth in the objection of claim 13.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 5, 7-8, 13, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darbee et al. (US 6,130,726), previously cited, and Donnelly (US 6,460,181 B1), previously cited.

As to claim 1, note the Darbee et al. reference discloses a program guide on a remote control display. The claimed receiver having an infrared receiving and transmitting means for transmitting electronic program guide (EPG) data is met by program guide information transmitted to remote control via an IR or RF communication link to an associated set-top box (8:44-52) wherein an infrared receiving/transmitting means for receiver is inherent to the device in order to facilitate communications with the corresponding remote control infrared receiving/transmitting circuits (7:6-30; 8:47-56).

The claimed EPG data contained in a received broadcast data is met by program guide and advertising data signal may be combined with television channel signals on a coaxial cable to form a composite signal where the composite signal may be broadcast by a content provider, such as a cable company or satellite network, and delivered to a set-top box (8:58-66). The claimed a program display and selecting apparatus remote from said receiver having a receiving means comprising an infrared receiver and transmitter unit is met by remote control unit 10 comprises IR transmitting and receiving circuits (7:6-30). The claimed for receiving the EPG data transmitted form said infrared receiving and transmitting means of said receiver is met by program guide information transmitted to remote control via an IR or RF communication link to an associated set-top box (8:44-52). The claimed "said program display and selecting apparatus comprising a displaying means for concurrently displaying the received EPG data" is met by remote control unit having a graphic display for depicting program scheduling and/or advertising information without causing an interruption in content that is being depicted on an associated television monitor (2:45-50). The claimed said broadcast receiver periodically transmitting EPG data is met by the rolling over of guide information at 4:00 am each day (Darbee et al. 8:20-23). Further note the Darbee et al. reference also discloses that it may be desirable to transmit blocks of program guide data to the remote control unit over additional intervals or, possibly, at random times (9:14-16), which satisfies the claimed periodic transmission of EPG data. The claimed "said program display and selecting apparatus comprises an operation means for operating said digital broadcast receiver" is met by the Darbee et al. reference disclosing a program executed by the microprocessor enables the remote control unit to perform conventional operations including, for

example, ON, OFF, Volume up or Down and Channel Up or Down functions (7:43-49), which satisfies the claimed operation means for operating said digital broadcast receiver. Note, it is understood that the remote control disclosed in the Darbee et al. reference has a communication link to the set-top box (8:50-52) and thus remote control commands are directed toward the operation of said set-top box. Note the Darbee et al. reference discloses cable, satellite, or broadcast television signals as data sources for remote control data information (Darbee 4:19-33). However, the Darbee et al. reference does not specifically disclose a digital broadcast receiving set-top box transmitting electronic program guide data in a received digital broadcast data, this is not considered a patentable distinction. Now note the Donnelly reference which discloses the transmission of program guide information in a digital signal (Donnelly 3:40-45) where transmission of television signals with programming guide information in an analog or digital signal is well known (Donnelly 3:11-16). Therefore the examiner submits that it would have been clearly obvious to one of ordinary skill in the art at the time the invention was made to modify the Darbee et al. reference set-top box with the Donnelly transmission of programming guide information in a digital signal broadcast for the purpose of providing using a transmission protocol that is capable of broadcasting a greater amount of programming to a viewer.

As to claim 5, wherein said program display and selecting apparatus comprises a transmitting means for transmitting operation information inputted into said operation means to said digital broadcast receiver; and said digital receiver comprises a receiving means for receiving the operational information transmitted from said program display and selecting apparatus. The Darbee et al. reference discloses a communication link

between a remote control unit and an associated set-top box (8:50-52). The Darbee et al. reference also discloses a remote control unit including IR transmitting and receiving circuits (7:10). The Darbee et al. reference does not specifically disclose a receiver comprising a receiving means for receiving the operation information transmitted from said program display and selecting apparatus but it is nonetheless inherent in the device for the purpose of establish a communication link between a remote control and set-top box.

As to claim 7, wherein said operation means selects a program to be monitored. The Darbee et al. reference discloses that if a program depicted on the display 14 of the remote control unit 10 is highlighted, one need only depress the EZ NAV key 20 to select that channel for viewing on an associated television set (11:8-11, also see Figure 1 and 8), which satisfies the claimed operation means selects a program to be monitored.

As to claim 8, note the Darbee et al. reference discloses a program guide on a remote control display. The claimed broadcast receiver comprising a transmitting means for transmitting EPG (electronic program guide) data is met by program guide information transmitted to remote control via an IR or RF communication link to an associated set-top box (8:44-52). The claimed data contained in a received broadcast data is met by program guide and advertising data signal may be combined with television channel signals on a coaxial cable to form a composite signal where the composite signal may be broadcast by a content provider, such as a cable company or satellite network, and delivered to a set-top box (8:58-66). The claimed "a program display and selecting apparatus remote from said digital broadcast receiver" is met by remote control unit 10 (Darbee 7:6-26). The claimed a receiving means for receiving EPG data transmitted from

the broadcast receiver is met by remote control unit includes an IR or RF transmitting and receiving circuits (7:10,18-21). The claimed "said program display and selecting apparatus comprising a display means for concurrently displaying said received EPG data" is met by remote control unit having a graphic display for depicting program scheduling and/or advertising information without causing an interruption in content that is being depicted on an associated television monitor (2:45-50). Note the Darbee et al. reference discloses cable, satellite, or broadcast television signals as data sources for remote control data information (Darbee 4:19-33). However, the Darbee et al. reference does not specifically disclose a digital broadcast receiving set-top box transmitting electronic program guide data in a received digital broadcast data, this is not considered a patentable distinction. Now note the Donnelly reference which discloses the transmission of program guide information in a digital signal (Donnelly 3:40-45) where transmission of television signals with programming guide information in an analog or digital signal is well known (Donnelly 3:11-16). Therefore the examiner submits that it would have been clearly obvious to one of ordinary skill in the art at the time the invention was made to modify the Darbee et al. reference set-top box with the Donnelly transmission of programming guide information in a digital signal broadcast for the purpose of providing using a transmission protocol that is capable of broadcasting a greater amount of programming to a viewer.

As to claim 13, the claimed "comprises operation means communicating with a transmitting means for transmitting the operational information input to said digital broadcast receiver" is met by a communication link between a remote control unit and an associated set-top box (8:50-52), wherein a remote control unit including IR transmitting

and receiving circuits (7:10), where it is understood operation information is transmitted via the IR communication means.

As to claim 15, the claimed "wherein said operation means selects a program to be monitored" is met by "...if a program depicted on the display 14 of the remote control unit 10 is highlighted, one need only depress the EZ NAV key 20 to select that channel for viewing on an associated television set" (Darbee et al. 11:5-11).

As to claim 16, the claimed "wherein said transmitting means transmits EPG data contained in a received digital broadcast data" is met by the Darbee et al. and Donnelly combination as discussed in the rejection of claim 8. The claimed "and said broadcast receiver includes a receiving means for receiving the operational information transmitted from the program display and selected apparatus" is met by "when the EZ NAV key 20 is depressed, channel selection macro data is provided to an associated set-top box (not shown) or television tuner circuit (not shown) wherein it is inherent that the set top box include a receiving means for the purpose of effectuating transmitted tuning commands.

6. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over previously cited references; Darbee et al. (US 6,130,726) in further view of Donnelly (US 6,460,181 B1) and Huang et al. (US 6,437,836).

As to claim 6, the Darbee et al. and Donnelly references discloses all the limitations of claim 4. However the Darbee et al. reference does not disclose wherein said operation means comprises a touch panel. The Huang et al. reference discloses operation means comprises a touch panel where an electronic program guide is seamlessly integrated with the remote: clicking on a program will allow one to immediately change to that program (Huang et al. 5:26-28, also see Figure 1A).

Therefore, it would have been clearly obvious to one of ordinary skill in the art at the time the invention to modify the Darbee et al. remote control with the Huang et al. remote control system to provide specialized functionality and features by dynamically constructing the user's remote control buttons on a graphical touch screen (Huang et al. 4:23-27).

As to claim 14, the Darbee et al. and Donnelly references discloses all the limitations of claim 12. However the Darbee et al. reference does not disclose wherein said operation means comprises a touch panel. The Huang et al. reference discloses operation means comprises a touch panel where an electronic program guide is seamlessly integrated with the remote: clicking on a program will allow one to immediately change to that program (Huang et al. 5:26-28, also see Figure 1A). Therefore, it would have been clearly obvious to one of ordinary skill in the art at the time the invention to modify the Darbee et al. remote control with the Huang et al. remote control system to provide specialized functionality and features by dynamically constructing the user's remote control buttons on a graphical touch screen (Huang et al. 4:23-27).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Darbee et al. '450 reference (US 6,002,450) discloses a two-way remote control with advertising display wherein the remote control device may communicate with a various set top box and other devices (Darbee 6:9-13).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnny Ma whose telephone number is (571) 272-7351. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jm

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